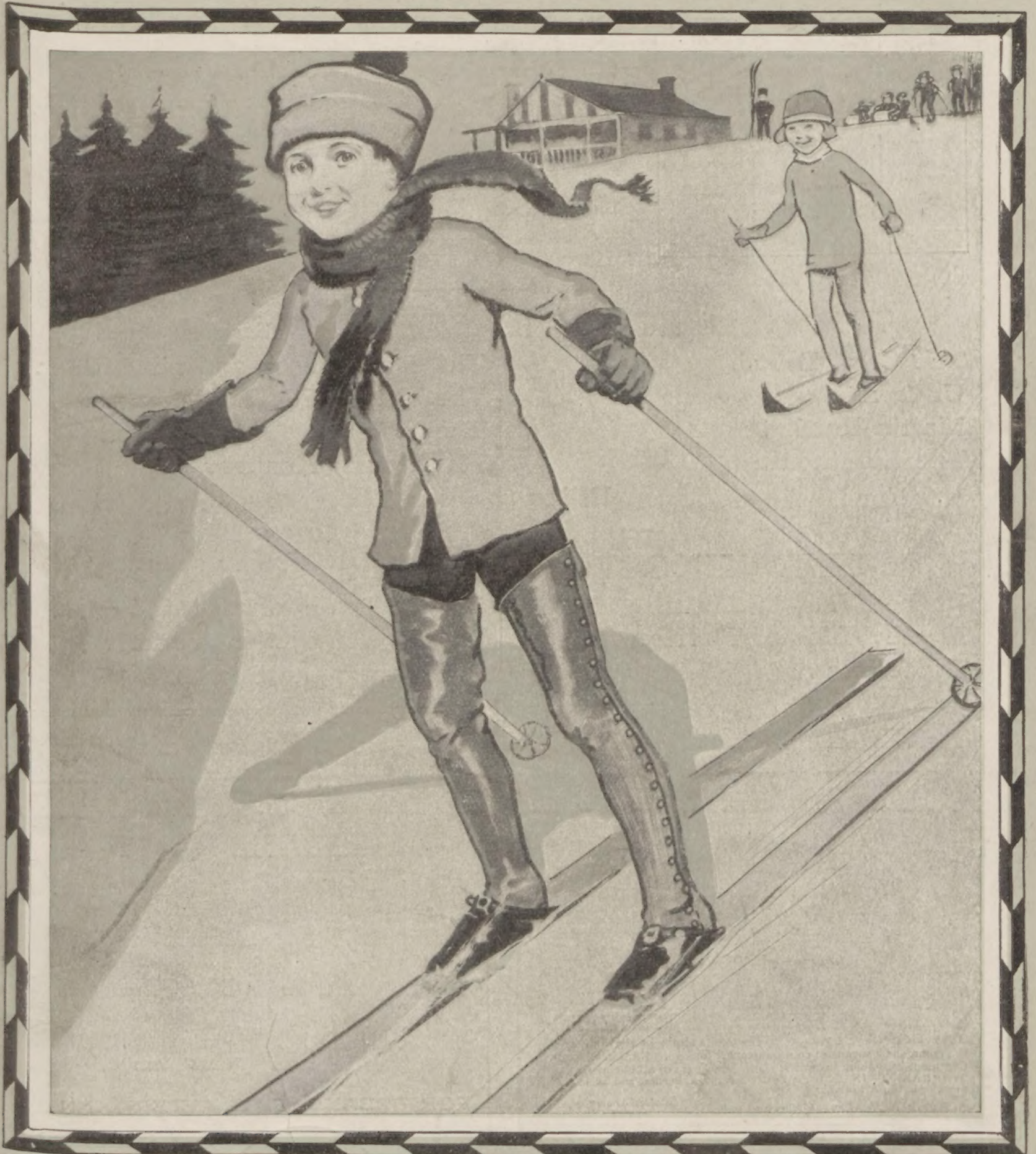


The Children's Paper

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THE CHILDREN'S PAPER

FEBRUARY 1924

THOMAS NELSON AND SONS, LTD.

P.J.

THE SECRET SERVICE BOY

BY LORD FREDERIC HAMILTON

EPISODE I (Concluded)

"I DIDN'T find out that cipher, Mr. Ambrose," explained P.J. "It was my cousin Christopher, the Sapper, showed it to me. Christopher is a jolly clever fellow. I told you that I thought that the message couldn't be in German, because it was full of y's, and there are no y's in German. If those people hadn't gone on so about Cumberland, I should never have tumbled to it." *



"I call that an extraordinarily clever and intelligent piece of work," said Ambrose at length. "I should have thought it very good if done by a full-grown man, and you are only a boy of fifteen. Where do you get it all from, I wonder."

"I'm not clever a bit, Mr. Ambrose, I'm just an everyday sort of a chap," protested P.J. "But I always could do puzzles and acrostics, and things of that sort, where you have to fit one thing into another. Please don't think that I am a brainy chap. Every one at Stonebridge knows that I'm an awful duffer at work, and about as fat-headed as they make 'em."

"Quite so, P.J. We will leave it at that. Of course most boys of your age would have the patience and the brains to work out so complicated a cipher. You have helped us in one thing, though. For weeks we have had our eye on the woman known in certain circles as J. 16, but there has not been a particle of evidence against her. Now, thanks entirely to you, there is. We can act now. I may add that she is the lady who signed herself 'Janet Fleming' in that note."

Ambrose paced the room in thought for a moment or two, and then went to the telephone on his writing-table.

"That you, Carew?" he asked, after a while.

"Yes, yes, to-night at nine sharp. Number 32 —"

* An almost similar cipher was actually employed by the enemy during the war.

Street. You will want two wardresses as well. Yes. Three men will be enough with me, and four more to surround the house at eight o'clock. Yes, of course. I will be down by 8.15. Yes, yes. Act on it at once," and he hung up the receiver.

"Mr. Ambrose, I may come too, mayn't I? I've never seen a real arrest, you know," cried P.J. eagerly, his face glowing with excitement. He had heard every word of the telephone conversation.

"No, no, quite impossible, my boy," replied Ambrose with decision. "I am most grateful to you for your help, and you may tell your father from me that you have proved wonderfully efficient. I should never have imagined that a boy of your age could have shown such shrewdness and intelligence," he added, giving his young assistant a friendly pat on the back. "I gather that you dislike being praised, so I won't say any more. I shall be away to-morrow; but if you care for some more work you might look in the day after to-morrow. Now you had better go home, and thank you again. By the way, Evans, the lift-man, is an old soldier, as you can see from his medal-ribbons, and you can trust him absolutely. Good-night."

Mr. Davenant, who had heard both the street and the number given in the telephone conversation, on reaching the ground floor, consulted a copy of the London Post Office Directory in the porter's box, and studied for a minute or two the portion marked "Streets." Instead of directing his way to Victoria Station, which would have taken him home, he turned due north. He entered a tea-shop, and finding his worldly wealth reduced to one shilling, made a strictly economical meal, and then passed an agreeable hour in St. Pancras Station studying the different types of locomotive used by the Midland Railway, and watching the marshalling of the various night expresses.

As the clock approached eight he dived into the Underground Railway.

At a quarter to nine that evening two taxicabs ascended the crescent facing Swiss Cottage Station, and after proceeding a short way, drew up, and four men and two women alighted and walked round the corner into a dimly lighted street, where they were joined by two more men. A slim young figure in an Eton suit suddenly appeared from the porch of a house.

"P.J.!" exclaimed Ambrose. "Whatever brought you here?"

"Well, the Metropolitan Railway did," replied Mr. Davenant placidly. "Now that I am here, please let me stay, Mr. Ambrose. I'm so frightfully keen on seeing how people are arrested."

"I particularly wish to avoid mixing you up in any rough work. It is not fair on your father,"

Ambrose hesitated. "You can stay in the hall if you like with these men, if you promise me to go nowhere else."

"I promise," cried the overjoyed P.J. "I do hope that there will be revolvers, and shooting and things like there are on the films."

"This, my boy, is serious business and not a game," said Ambrose. "You can follow us when we go in, but you are to stay in the hall, and you must keep silent. Arbuthnot, this young gentleman is to stay with you. You will, of course, see that whoever answers the bell does not give the alarm."

"Very good, sir."

"Carew, you will come with me into the room where they are. Get your gun out," and Ambrose as he spoke drew his automatic from his hip pocket. "We are quite ready, Arbuthnot; ring the bell."

"Oh! good egg!" murmured P.J. under his breath. "There are revolvers! It's just like a real film."

After an interval there came the rattling of a chain, and the door opened three or four inches. The man addressed as Arbuthnot instantly put his foot forward into the opening, to prevent the door being closed again, and spoke in a low voice to the elderly woman who was still holding on to the woodwork of the door.

"We are the police, and for your own sake I advise you to make no noise, or you will get into very serious trouble indeed. Open the door, and keep quite silent."

The woman turned a scared white face on the group of men on the doorstep, and opened the door without a word. They all passed in silently, and found themselves in a large hall bright with gaslight. From a door on the left-hand side came the sounds of loud talking and laughter. There was a quality about the outbursts of coarse laughter and in the tones of the voices which suggested that the unseen inmates of the room had been indulging freely in alcoholic stimulants.

So loudly indeed were they talking, that it was obvious that they had never noticed the ringing of the door-bell, and that they were entirely unconscious of the entrance of the police into the house. Mr. Davenant was able to follow most of the conversation, for it was in a language very familiar to him.

Ambrose made a sign to Carew, and they flung open the door on the left, and entered the room together.

"Hands up at once, all of you!" rang out a voice so stern that P.J. found it difficult to associate it with his genial middle-aged friend. "I am sorry to have to break in on so pleasant a supper-party, but I warn you that if any one attempts to move I shall shoot him or her at once. Parsons and Jones, come in here! I shall want four pairs of bracelets. I think that you heard my warning, Löwenthal. Do not force me to shoot."

P.J. saw two of the men from the hall hurry into the room, each of them carrying two pairs of a curious-looking steel apparatus.

"You, Hill, put out your wrists," commanded

Ambrose's voice. "Remember that I have got you covered. Thank you. Your turn now, Löwenthal; and now you, madam, please. I might merely address you as 'J. 16,' or as 'Janet Fleming,' but I think that Amalia Schwartz would be a more accurate description of you. Now I must trouble you, sir, to hold out your wrists. Quite so, you claim to be a Dutch subject, but that is a claim we must examine a little. There are an astonishing number of Dutch subjects in England just now."

A perfect tornado of noise now issued from the side room. All four prisoners were talking at once, and each of them at the top of his or her voice. P.J. turned to Arbuthnot.

"Mr. Ambrose said 'hands up,' just as they do in books," he gurgled in a very ecstasy of delight, "and they both drew out their pistols. It is all just like the movies, only far, far better, because it's all real. It's too ripping for words."

"You mustn't go in there, sir," reminded Arbuthnot. "Remember that you promised Mr. Ambrose to stay in the hall here."

"Hullo! what's that she's saying?" cried P.J., as a German sentence in a strident woman's voice caught his ear. "She's saying to the men that she'll send off her message, police or no police. Mr. Arbuthnot, you must let me go in and tell Mr. Ambrose. That woman means to score off him somehow, and nobody in there understands one word of German. 'I must go in.'"

"You can't, sir. Mr. Ambrose's orders. Besides, you promised not to."

"Blow! She's got some dodge she's up to, and Mr. Ambrose doesn't know. She's still going on. What the dickens does she mean by transports, and 21 and 34? Why doesn't Mr. Ambrose understand German? Green marble and the maid-servant! Why, she's talking perfect rot. Green marble, the maid-servant, transports 21 and 34. The woman must be absolutely dotty in the filbert, or clean off her chump."

P.J. in his perplexity began to look about him. He was standing in a spacious hall with a broad staircase running round three sides of it. The hall was bare of furniture, and the floor was covered with an oilcloth feigning to represent great blocks of white marble, with small lozenges of green marble crossing it at intervals.

"Thompson," called Ambrose's voice from the inner room, "get a taxi up. Then you can accompany Parsons and Jones, who will take the three male prisoners to—you know where. Miss Wells, I want you in here, please."

Miss Wells, a person of powerful physique, with a most determined face, moved into the inner room, where a woman's voice began protesting stridently.

"Take the three men into the hall," ordered Ambrose, following them out himself. "Now, Miss Wells, search the prisoner very thoroughly. It is perfectly useless your protesting, madam; you will be left alone with the wardress, and you had better submit quietly."

"Mr. Ambrose," whispered P.J. excitedly, "that

woman means to do you in the eye, and to score off you somehow."

"I daresay that she would like to, but she isn't in a position to do so now."

"She's going to all the same," persisted P.J. "I heard her say so."

"Make your mind quite easy, my boy; she can't."

The purr of a taxi was heard at the door, and the three male prisoners were escorted to it by Parsons and Jones, who drove off with them, constable Thompson taking his seat on the box.

P.J., standing in the hall with Ambrose, Carew, Arbuthnot, and the second wardress, experienced his usual difficulty in keeping silent. He wished to discuss the events of the evening, but was immediately hushed-down by Ambrose. The adventure was becoming distinctly less exciting than he had anticipated. He looked up into the well of the staircase, which, though brightly lit by a gas pendant above his head, faded off into comparative darkness on the upper floors. He distinctly saw the elderly maid-servant who had admitted them leaning over the banisters on the second floor.

From the inner room there came no sound. The door opened, and Miss Wells, the grim-looking wardress, appeared, escorting a short, stout, middle-aged woman elaborately and expensively dressed, with skirts of fashionable shortness. The position in which she kept her hands suggested that she might have been deprived of the use of them for the time being. She wore a hat and a cloak, which had been somewhat carelessly adjusted, Miss Wells evidently considering it no part of her duties to act the part of a trained lady's-maid. Miss Wells, without one word, handed Ambrose a sheaf of papers, which he thrust equally silently into his pocket. Drawing the wardress on one side, he gave her some final directions in a low tone.

Meanwhile the prisoner, in order apparently to show her indifference to the situation in which she found herself, began pacing the hall, her crossed and manacled hands in front of her. Out of bravado, she amused herself by standing on the green lozenges of the oil-cloth, moving from place to place, and attempting to get both her feet at once on to the small squares. Mr. Davenant, who was by this time thoroughly enjoying his novel experience as an amateur policeman, followed her movements with the utmost interest. Happening to glance upwards, he caught the dim outline of the elderly maid-servant leaning over the banisters in the shadows above. He gave a short whistle of two notes, with the interval of a major third between them.

A taxi again hummed at the door, and the formidable Miss Wells, accompanied by the second wardress, seized her prisoner by the arm and led her down to the cab. They drove off.

P.J. drew a knife from his pocket, and, bending down, he cut little gashes in four of the green lozenges of the oilcloth.

"Come, come, sir," said Arbuthnot reprovingly, "you are too old to do mischief for mischief's sake. You've spoilt that nice piece of oilcloth."

"I'm sorry," said P.J. meekly. "Perhaps I oughtn't to have done it. Mr. Ambrose, you told me not to jaw, but there's something I simply must say to you. Not here, because that woman is up on the landing. Can't we go into the room there? It really is frightfully important."

They went into the room, where the air was still thick with tobacco smoke. The table was littered with the *débris* of an elaborate supper. Slim-necked, gold-foiled bottles stood about, most of them empty, as well as bottles of liqueurs and spirits.

"Mr. Ambrose," cried P.J. in great excitement, "you really mustn't let that old servant go. She knows. The fat woman told her. She knows."

"What *do* you mean, my dear boy? What is it that she knows?"

"Why, about the transports."

"What transports? I don't understand what you are driving at."

"Aren't four transports sailing from Southampton to-morrow, and two from Bristol?"

Ambrose scrutinized his youthful assistant very closely.

"Possibly," he said at length; "but how the dickens do you come to know anything about it? I'll swear that I never told you. How did you get hold of that?"

"Because the fat woman you arrested knew, and she told the other woman."

"But the prisoner never opened her mouth in the hall."

"No, she never said one word."

"And she was handcuffed, so she couldn't write or drop a note."

"No, she didn't do it like that."

"My dear P.J., what is this extraordinary idea that you have got into your head? The thing is impossible; she had no chance of communicating with any one."

"All the same I know, and the old woman upstairs knows. Do you mind coming back into the hall, Mr. Ambrose? Look! I notched with my pen-knife the little green squares she stepped on. You remember," he added, dropping his voice to a whisper, "the list of numbered ports I learnt by heart this morning—17 Dover, 18 Folkestone, 19 Newhaven, 20 Portsmouth, 21 Southampton, 32 Plymouth, 33 Falmouth, 34 Bristol, 35 Cardiff. It was rather a sweat, but I'm jolly glad now I did learn them. Here's my mark on the first square. Please count how many green squares there are from the street door. It's the first, isn't it? In which line is it? The second. What does a 2 and a 1 make? No, not 3; I meant side by side, the 2 first; 21, isn't it? And 21 is the number for Southampton in that list I mugged up. Then she stood on this square (you'll see my cut), in the short line in the recess. One, two, three, four, isn't it? Then the next she stood on is here; I hacked it about more than I meant to. What square in the row is it? Yes, four; and which row is it in? The third. That makes 34, and 34 is Bristol. Then she stood on that one in the short row in the recess; you can see my mark quite

plainly, because my knife slipped a little; number two. So it comes out, four transports from Southampton, two from Bristol. I notched the places so that I shouldn't forget them."

"I call that an extraordinarily good piece of work, sharp little assistant. For a trained man it would have been a highly creditable performance, but for an amateur, and an amateur only fifteen years old, it is really a wonderful piece of observation. However did you tumble to it at all?"

"The fat woman told me when they were all kicking up such a shindy in here. She called out to one of the men in German that, police or no police, she was going to pass on something about transports that I couldn't catch. Then I heard '21 and 34; green marble and the maid-servant.' I thought at first that she'd gone quite dotty, but when I looked up and saw the old woman peeping over the banisters, and noticed the linoleum like white and green marble, well—one had only to stick it together like a picture puzzle."

"Very intelligent of you indeed, P.J. Wonderfully intelligent!"

"No, it wasn't really. I told you that I could always do acrostics and puzzles, and things like that. All the chaps at Stonebridge will tell you what a thick-headed blighter I am at other things. I say, Mr. Ambrose, aren't you going to collar that old woman? She knows."

"Carew and Arbuthnot, go quietly upstairs and arrest that elderly woman," cried Ambrose, moving back into the hall. "If she has locked herself in, break down the door. No, no, P.J., you stay here."

"You don't let me see anything of the fun, Mr. Ambrose," protested P.J. plaintively.

Carew and Arbuthnot had meanwhile darted upstairs, and soon a noise of heavy blows re-echoed through the house. There was a sound of rending woodwork, and of shrill protests and expostulations as the two men led their elderly captive downstairs.

P.J. could not resist pointing to his knife-cuts on the oilcloth, and explaining in German to the prisoner that their code was no longer a secret.

"What a dreadful country is this!" bewailed the old crone in English, "where the police are not ashamed to capture a German boy to do their dirty work for them!"

"I'm not a German, confound you," cried the infuriated P.J.

"Then it is worse; even the very children in this wicked country are all spies," lamented the old woman.

"You can take her straight to Holloway, Carew. Of course she is on no account to communicate with the other woman. You, Arbuthnot, had better search the house thoroughly, as soon as we are gone."

"Very good, sir. That was a wonderful smart bit of work of the young gentleman's, him looking so innocent too."

"Well, I'll tell you what I think," declared P.J. "I call the fat woman a real sport, because she did her job, even when she thought she might be shot or hanged for it."

"Hardly that," protested Ambrose. "We are not so drastic in our methods. Three to five years' detention would be the maximum penalty."

"All the same she was a bit of a sport for doing it, when she knew that she was going to quod. Do you think, Mr. Ambrose, that I might wolf some of that supper?" asked P.J. "There's still some lobster salad and a whole trifle left. I'm most frightfully hungry, for I forgot my money, and I'd only got a bob in my pocket, and all I've had since luncheon is one cup of tea and two mangy little scones."

"I am going to take you to supper at my club."

"Oh! good egg! You are decent to me, Mr. Ambrose! I shall be rather shy at having supper at a club."

Mr. Davenant's hunger being appeased, Ambrose took a most cordial leave of his young friend.

"I have gathered that you dislike being praised, but you have been extremely useful to me to-day, P.J., and I think that you have a natural gift for this class of work. In fact, I have had a piece of real luck in striking on you. If I have not worked you too hard to-day, can I expect you on Tuesday morning at ten?"

In his home at Dulwich, Mr. Davenant sleepily extended a pyjama'd arm to turn out his bedside light.

"Being a Secret Service man is really the most ripping game that I've ever played in my life," he reflected.

END OF THE FIRST EPISODE

I Stood Tiptoe

I STOOD tiptoe upon a little hill,
The air was cooling, and so very still,
That the sweet buds, which with a modest pride
Pull droopingly, in slanting curve aside,
Their scanty-leaved and finely-tapering stems
Had not yet lost their starry diadems
Caught from the early sobbing of the morn.
The clouds were pure and white as flocks new shorn,
And fresh from the clear brook; sweetly they slept
On the blue fields of heaven, and then there crept
A little noiseless noise among the leaves,
Born of the very sigh that silence heaves;
For not the faintest motion could be seen
Of all the shades that slanted o'er the green.

JOHN KEATS.

Motto for February

The days are ever divine. They come and go like muffled and veiled figures; but they say nothing; and if we do not use the gifts they bring, they carry them as silently away.

EMERSON.

Sent in by DULCIE ROSE,
110 Revelstoke Road, Southfields, S.W.18,
to whom a book prize has been awarded.



SMILES

*"The happy smiles of the young
are the sunshine of the old"*



"SILENCE in court," cried the judge. "The next man who shouts will go out."

"Hurrah!" cried the prisoner.

Sent in by VERA PRYCE,
Wynch Fawr, Mountain Hare, Merthyr Tydfil,
to whom a book prize has been awarded.

✦ ✦ ✦

THE teacher had been explaining the meaning of gladiator when she noticed that a little boy was not taking any interest in the lesson.

"Johnny," said the teacher, "give me a sentence with the word gladiator."

After a moment's hesitation, Johnny replied, "The lion pounced upon the woman, and was gladiator."

Sent in by JAMES BLACKWOOD,
6 Fyfe Place, Johnstone,
to whom a book prize has also been awarded.

✦ ✦ ✦

Teacher. "I know what you had for your breakfast this morning, Tommy."

Tommy. "What?"

Teacher. "Eggs."

Tommy. "No; that was yesterday's."

Sent in by AMY HOCKLEY,
Barnsole Road, Gillingham, Kent.

✦ ✦ ✦

A LABOURER having dug a hole asked the foreman where to put the sand.

"Begorra," said the Irish foreman, "dig another hole and put it in."

Sent in by KITTY HAYES,
12 Alexandria Road West, St. Anne's-on-Sea.

✦ ✦ ✦

A CLERGYMAN who advertised for an organist received this reply.

Dear Sir,—I notice you have a vacancy for an organist and music teacher, either lady or gentleman. Having been both for several years, I beg to apply for the position.

✦ ✦ ✦

American. "I say, guy, over where I stay they grew a cabbage, and it so big that a troop of soldiers could lie in its shade."

Sandy. "That's nothing. Up the Clyde they made a boiler, and when a man threw a stone into it I heard it hitting the bottom three days afterwards."

American. "What did they make it for?"

Sandy. "Oh, to boil the cabbage in it."

Sent in by JOHN PERRY,
59 Regent Street, Greenock, Scotland.

A SMALL boy who was staying at a farm rushed indoors one day and breathlessly exclaimed that a mouse had fallen into a churn full of milk.

"And did you take it out?" asked the farmer.

"Of course not," answered the boy; "I put the cat in."

Sent in by HILDA BOURNE,
Stoneybridge, Belbroughton, near Stourbridge.

✦ ✦ ✦

"WHAT time next train go Washington?" a travelling Chinese asked the railway information clerk.

"Two-two," replied the official.

"I know the train go too-too," insisted the Chinese.

"I no ask how he go; I ask when he go."

Sent in by ROSEMARY EASTON,
"Hopeleigh," Fairhope Avenue, Pendleton, Manchester.

✦ ✦ ✦

Yankee. "You Britishers are a slow lot o' guys. We've gotten monkeys selling papers in Noo York."

Ancient Briton. "That's easily beaten. Here in Glasgow we've Lyons selling tea."

Sent in by PETER PERRITT,
5 Chisholm Street, Glasgow.

✦ ✦ ✦

A LADY went into a fur shop and asked for a muff.

The salesman asked her what fur.

The lady said "to keep my hands warm."

Sent in by ROBERT SEFTON CRAIG,
107 Canal Street, Newry, Co. Down, Ulster.

✦ ✦ ✦

ONE evening whilst out with my mother shopping we stopped at a confectioner's shop, which was situated next door to a tailor's shop. I overheard a gentleman say to his little boy,—

"Now, Willie, I am going to buy you a new pair of trousers, and you shall choose them. Which pair do you want?"

The boy gazed at the goods in the shop window for a few moments, and then replied,—

"Please, father, may I have those marked 'Cannot be beaten'?"

Sent in by ARTHUR SKINNER,
the Southfield School.

✦ ✦ ✦

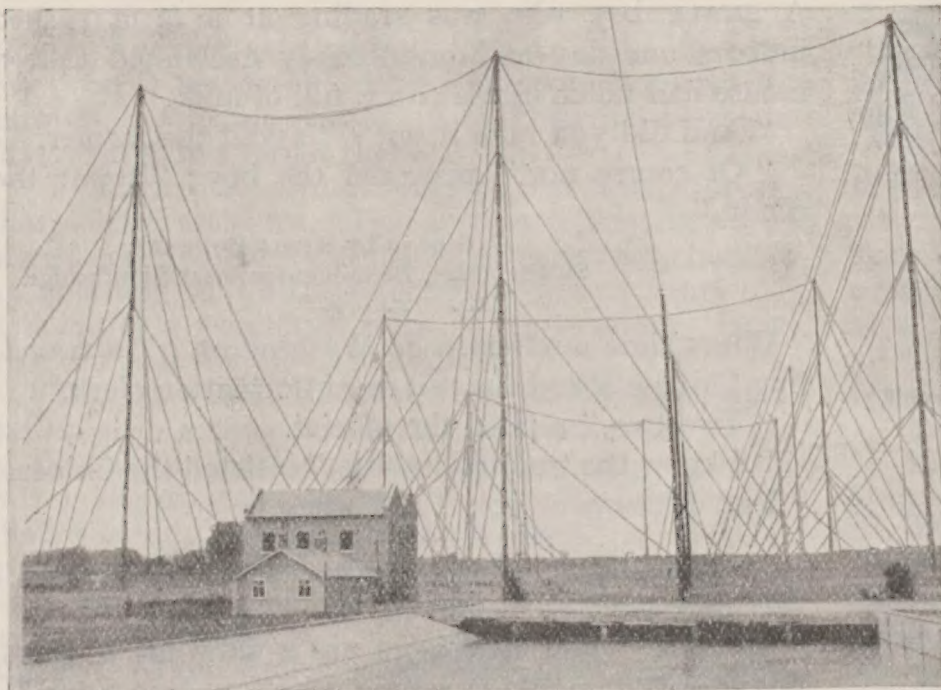
"Is Johnny's new dog a setter or a pointer?" asked Mrs. Jones.

"He's neither," replied her neighbour. "He's an upsetter and a disappointment."

✦ ✦ ✦

THE *Educational Times* gives some amusing howlers of the class which arises from the confusion of two words. One reads that a centurion is a man who lives a hundred years; that Mr. Joseph Chamberlain was a Conservatory; that a vacuum is a large empty space where the Pope lives. The prevalence of crime in the days of Elizabeth is suggested by the line,—

"The red glare on Skiddaw woke the burglars of Carlisle."



The 300 ft. Masts at Leafield, Oxford. (Copyright, S.I.B.)

Radio-Telephony and Broadcasting

(Continued)

AFTER leaving the aerial of the transmitting station, the waves fall upon the aerial of the receiving station (Fig. 7, G, Jan. number, p. 7). Here the variations in the carrier wave are received in exactly the same form as that in which they left the transmitting station. They pass through a tuner (H), which tunes the receiving aerial to the wave-length of the transmissions. The waves when received are at Radio-frequency and beyond the range of audibility, and they must be rectified by a crystal or valve detector (J). As in the case of Radio-telegraphic reception, this detector cuts off half the waves, leaving the remaining half as a fluctuating current flowing in one direction only. On this being passed through the telephone receiver, it affects the diaphragm in an exactly similar manner to that already explained.

Radio-telephony became a practical proposition when Duddell discovered (in 1900) that the "singing arc" emitted continuous oscillations of constant amplitude. He found that by introducing a controlling microphone in the circuit these oscillations could be used as a carrier wave for the superimposed variations. As the highest frequency obtainable with the arc was only about 10,000 per second, the results were limited until Poulsen improved the arc. The requisite increased frequency having thus been obtained, Radio-telephony over greater distances was successfully carried out. Long-distance tele-

phony was still impossible, however, because of the difficulty in making the telephone transmitter carry a sufficiently powerful current for long-distance working.

Because of the necessity for a greater variation in the carrier wave, the current in Radio-telephony is considerably greater than the current used in the line-telephone. It was found that the ordinary telephone transmitters would not stand up to any current that exceeded their ordinary supply.* They rapidly deteriorated, and the carbon granules became burnt out, even when an attempt to improve matters was made by surrounding the carbon with a water jacket for cooling purposes. By using a number of transmitters coupled together, however, a current of considerably greater power† was obtained. Even with such an arrangement, Radio-

telephony up to 200-300 miles only was possible, and at that distance the limit seemed to have been reached.

A revolution was effected by the introduction of the thermionic valve, however, and this served as an amplifier at both the transmitting and receiving stations. Developments in transmitting valves have been so rapid and successful that it seems probable that they will eventually displace the arc and high-frequency alternators for telegraphic transmission. The perfection of these large valves is being proceeded with, and systems evolved to make possible continuous communication by Radio-telephony over distances as great as those covered by Radio-telegraphy. This will be a great commercial advantage, for at present—owing to a limitation known as the "condenser effect"—line-telephony is impracticable over more than about 50 miles of submarine cable.

In the meantime, successful experimental transmissions of long distance Radio-telephony have been made from time to time. Among the earliest may be mentioned the results obtained in 1915 ‡ when, by using numerous valves in cascade working, speech was transmitted from Arlington, U.S.A., to Honolulu and Paris, over a distance of 4,500 miles. Subsequently speech was transmitted§ from Chelmsford to Rome and other European cities, as well as to America.

Even more recently (14th January 1923), a demonstration was given|| of the possibilities of Radio-telephonic communication across the Atlantic, over

* About 20 to 30 milliampères.

† About 15 ampères.

‡ By the American Telephone and Telegraph Company.

§ By the Marconi Company.

|| By the Western Electric Company.

a distance of 3,200 miles. This was the outcome of a series of experiments made with a view to discovering the commercial possibilities of wireless telephony with America. Previously in these experiments, the transmission of single words and numbers only had been used, but so successful were the results of these latter experiments that it was decided to publicly transmit a complete message from New York to London. It was arranged that this should commence at 2 a.m., and sharp to the minute the American station was heard calling and giving a list of American towns. Telephony continued until 4 a.m., when it was concluded by the wish that "this latest means of communication would soon be in operation between America and the mother country, and that the Radio-telephone would bring England and America closer together in the bonds of friendship." Speech was clearly audible throughout the test, and much louder than on an ordinary line-telephone. It was heard simultaneously by about sixty persons, including Sir Evelyn Murray (Secretary of the General Post Office), Sir A. Shirley Benn, M.P. (President of the Associated Chambers of Commerce), and Senator Marconi. Reception was effected at London on a 6-ft. frame aerial, with a four-valve receiving set, three extra valves being employed to increase the strength of the signals, so that they might be heard in the sixty telephones used.

One of the most remarkable applications of Radio-telephony to commercial requirements is its use in connection with aeroplanes. Aeroplanes engaged in the cross-Channel service are in constant communication throughout their flight with the ground stations. Amateurs in the London district have no difficulty in listening-in to pilots in conversation with Croydon, Pulhan, and Lympne, giving details of their position, speed, air currents, and weather reports. Recently a record was established by a British aeroplane,* remaining in constant telephonic communication with Croydon, even up to the time of landing in Holland. Speech was perfectly clear, and was heard even above the roar of the engines, when hovering over the aerodrome at Amsterdam. Not only will such conversations become generally possible, but a passenger, desiring to speak to his office in, say, London, will be able to do so, even though the aeroplane in which he is seated is some thousands of feet up, over the English Channel! At present this is not practicable as a general matter, although it has actually been carried out experimentally, and a passenger has been placed in communication with his office in the City, via the aerodrome at Croydon and the land lines.

* Piloted by Captain W. G. R. Hinchliffe.

Two Ways of Telling a Story

BY JEAN INGELOW

(Continued)

"HEYDAY!" cries the boy, "what's this? Oh, how it tears my hands! Oh, this thorn-bush! Oh, my arms! I can't get free!" He struggles and pants. "All this comes of leaving the path," he says; "I shouldn't have cared for rolling down if it hadn't been for this bush. The fern was soft enough. I'll never stray in a wood at night again. There, free at last! And my jacket nearly torn off my back!"

With a good deal of patience, and a great many scratches, he gets free of the thorn which had arrested his progress, when his feet were within a yard of the water, manages to scramble up the bank, and makes the best of his way through the wood.

* * * * *

And now, as the clouds move slowly onward, the moon shows her face on the black surface of the water; and the little white owl comes and hoots, and flutters over it like a wandering snowdrift. But the boy is deep in the wood again, and knows nothing of the danger from which he has escaped.

All this time the dark passenger follows the main track, and believes that his prey is before him. At last he hears a crashing of dead boughs, and presently the little midshipman's voice not fifty yards before him. Yes, it is too true; the boy is in the cross track. He will pass the cottage in the wood directly, and after that his pursuer will come upon him.

The boy bounds into the path; but, as he passes the cottage, he is so thirsty, and so hot, that he thinks he must ask the inhabitants if they can sell him a glass of ale. He enters without ceremony. "Something to drink?" says the woodman, who is sitting at his supper. "Perhaps my wife can give thee a drink of milk. Come in." So he comes in, and shuts the door; and, while he sits waiting for the milk, footsteps pass. They are the footsteps of his pursuer, who goes on with the stake in his hand, and is angry and impatient that he has not yet come up with the boy.

The woman goes to her little dairy for the milk, and the boy thinks she is a long time. He drinks it, thanks her, and takes his leave.

Fast and fast the man runs on, and, as fast as he can, the boy runs after him. It is very dark, but there is a yellow streak in the sky, where the moon is

ploughing up a furrowed mass of grey cloud, and one or two stars are blinking through the branches of the trees.

Fast the boy follows, and fast the man runs on, with his weapon in his hand. Suddenly he hears the joyous whoop—not before, but behind him. He stops and listens breathlessly. Yes, it is so. He pushes himself into the thicket, and raises his stake to strike when the boy shall pass.

On he comes, running lightly, with his hands in his pockets. A sound strikes at the same instant on the ears of both; and the boy turns back from the very jaws of death to listen. It is the sound of wheels, and it draws rapidly nearer. A man comes up, driving a little gig.

"Halloa!" he says, in a loud, cheerful voice. "What! benighted, youngster?"

"Oh, is it you, Mr. Davis?" says the boy. "No, I am not benighted; or, at any rate, I know my way out of the wood."

The man draws farther back among the shrubs. "Why, bless the boy," he hears the farmer say, "to think of our meeting in this way. The parson told me he was in hopes of seeing thee some day this week. I'll give thee a lift. This is a lone place to be in this time o' night."

"Lone!" says the boy, laughing. "I don't mind that; and, if you know the way, it's as safe as the quarter-deck."

So he gets into the farmer's gig, and is once more out of reach of the pursuer. But the man knows that the farmer's house is a quarter of a mile nearer than the parsonage, and in that quarter of a mile there is still a chance of committing the robbery. He determines still to make the attempt, and cuts across the wood with such rapid strides that he reaches the farmer's gate just as the gig drives up to it.

"Well, thank you, farmer," says the midshipman, as he prepares to get down.

"I wish you good-night, gentlemen," says the man, when he passes.

"Good-night, friend," the farmer replies. "I say, my boy, it's a dark night enough; but I have a mind to drive you on to the parsonage, and hear the rest of this long tale of yours about the sea-serpent."

The little wheels go on again. They pass the man; and he stands still in the road to listen till the sound dies away. Then he flings his stake into the hedge, and goes back again. His evil purposes have all been frustrated—the thoughtless boy has baffled him at every turn.

* * * * *

And now the little midshipman is at home—the joyful meeting has taken place; and when they have

all admired his growth, and decided whom he is like, and measured his height on the window-frame, and seen him eat his supper, they begin to question him about his adventures, more for the pleasure of hearing him talk than any curiosity.

"Adventures!" says the boy, seated between his father and mother on a sofa. "Why, mamma, I *did* write you an account of the voyage, and there's nothing else to tell. Nothing happened to-day—at least nothing particular."

"You came by the coach we told you of?" asks his father.

"Oh yes, papa; and when we had got about twenty miles, there came up a beggar, while we changed horses, and I threw down (as I thought) a shilling, but, as it fell, I saw it was a sovereign. She was very honest, and showed me what it was, but I didn't take it back, for you know, mamma, it's a long time since I gave anything to anybody."

"Very true, my boy," his mother answers; "but you should not be careless with your money; and few beggars are worthy objects of charity."

"I suppose you got down at the cross-roads?" says his elder brother.

"Yes, and went through the wood. I should have been here sooner if I hadn't lost my way there."

"Lost your way!" says his mother, alarmed. "My dear boy, you should not have left the path at dusk."

"Oh, mother," says the little midshipman, with a smile, "you're always thinking we're in danger. If you could see me sometimes sitting at the jib-boom end, or across the maintop-mast cross-trees, you *would* be frightened. But what danger can there be in a wood?"

"Well, my boy," she answers, "I don't wish to be over-anxious, and to make my children uncomfortable by my fears. Why did you stray from the path?"

"Only to chase a little owl, mamma; but I didn't catch her after all. I got a roll down a bank, and caught my jacket against a thorn bush, which was rather unlucky. Ah! three large holes I see in my sleeve. And so I scrambled up again, and got into the path, and asked at the cottage for a drink. What a time the woman kept me, to be sure! I thought it would never come. But very soon after Mr. Davis drove up in his gig, and he brought me on to the gate."

"And so this account of your adventures being brought to a close," his father says, "we discovered that there were no adventures to tell!"

"No, papa, nothing happened; nothing particular, I mean."

STORIES for YOUNGER READERS



Brer Rabbit's Adventure

BY JEAN M'INTOSH

SAID Brer Rabbit to his wife one day, "Oh, how I should like to see the world ! It is very dreary living in this green field, and always having the same thing over and over again."

"My dear," answered his wife, "it is a dangerous world beyond the green fields, where all manner of strange things dwell, and two-footed animals lie in wait to gobble you up. I do not want to leave my little burrow."

And Brer Rabbit's wife tucked herself up in her little bed and went to sleep.

But Brer Rabbit kept thinking and thinking, and longing and longing to go beyond the green field in which he had his home ; and one morning he popped out of his hole and ran away.

Over the fields he went faster and faster. On the way he passed whole families of rabbits, and when they called after him, "Where are you going to, Brer Rabbit ?" never a word he answered.

At last Brer Rabbit began to feel tired. It was long since he had left his home, and he had travelled many, many miles, and now felt very hungry.

"I wonder where I could get something to eat," he said to himself.

But he looked about in vain. Not a blade of nice sweet grass could he see anywhere, and he began to feel very sad.

"Oh, what shall I do ?" thought poor Brer Rabbit. "How I wish I had never left my nice home !"

But now he was too tired to go back ; and even if he would, he could not go, for, in

his haste, he had not noticed by which way he had come.

Just then he spied a nice box with a lot of straw in it.

"Ah," said Brer Rabbit, "this looks a nice quiet bed. I will just pop in here and have a good sleep."

So in he popped, and curled himself up in the corner, and soon fell fast asleep.

Brer Rabbit must have been sleeping for a long time when he awoke with a start.

And what do you think had happened ?

Some one had put a chair inside the box and packed it in with more straw, and now the lid was being hammered on, and poor Brer Rabbit was too terrified to move. There he was held fast in a prison, and no one to let him out.

"Oh dear, dear me !" wailed Brer Rabbit.

"If only I had taken my wife's advice and never left my home !"



But Brer Rabbit wailed in vain, for never an answer was there to his cry.

Presently Brer Rabbit felt the box being lifted and put into a train. Then the door was shut, the whistle blown, and away he went, far across the country to a strange land.

Brer Rabbit shivered and shook with fright, and he got so ill with hunger that he was forced to eat the hard coarse straw. How he longed for some green grass and a nice cool drink !

After many hours the train stopped and the box was taken out ; then it was put into a van and taken to a big shop in a town. There, with poor Brer Rabbit still in it, the box was put into a dark cellar.

After a time a man came to the box and took off the lid ; then he took out the chair.

"I am lost now," said Brer Rabbit, "for surely this is a two-footed animal come to gobble me up."

So he huddled himself up in the corner, but it was so dark in the cellar that the man never saw him, and he took the chair away, and left Brer Rabbit all alone, and *the lid off the box*.

"Now," said Brer Rabbit, "I am at least free of this box, but I will just wait awhile before I pop out in case any one should come in and see me."

So he waited till all was quiet, and then popped out of his prison. Oh, how weak and ill he did feel! He could scarcely hop round the floor. He looked all over for something to eat, and found some crumbs, but no water to drink.

So Brer Rabbit stayed there all that night, and the next day, until he was almost dead and had lost count of time.

* * * * *

"O sir," said Bob, the errand boy, to his master, "there is a great big rat in the cellar. I have never seen such a big one before, and I am almost afraid of it."

"I will come and see," said the master. And off he went with Bob to the cellar.

Bob opened the door and peeped in.

"It is still there," said he.

"Let *me* look," exclaimed the master, and he too peeped in at the door. "Why," he said, "that is not a rat; it is a *wild rabbit*."

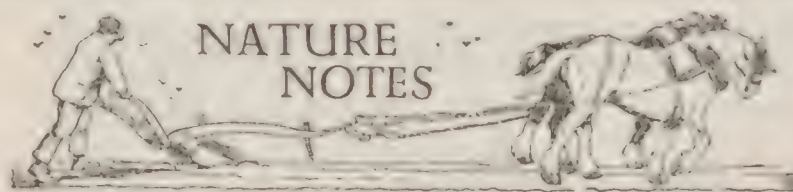
Bob's eyes nearly dropped out with surprise. And no wonder, for here was poor Brer Rabbit sitting in the corner, too weak and ill to run away.

"Now," he thought, "I must surely die, for I am caught at last."

But Bob's master was a kind man, and he loved animals very much.

He took Brer Rabbit up in his arms, gave him some milk to drink and biscuits to eat, and then put him into a warm basket and took him home for his children to look at.

That same day they took Brer Rabbit away into the country, and put him down in a lovely green field, and gave him his freedom.



The Earwig

"AN Earwig! Oh, don't bring it near me! Kill it! Take the horrid thing away!"

Such is, I think, the greeting which an Earwig generally receives if it appears among us; but this cold reception is quite undeserved. The small, long-bodied creature is most harmless and will injure no one. On the contrary it is a very interesting insect, well worthy of attention.

"But will it not creep into people's ears if it should chance to find them when they are asleep, and from the ear go on till it has reached the brain?"



COMMON EARWIG
(MALE).

LESSER
EARWIG.

COMMON EARWIG
(FEMALE).

There is no record of an Earwig having ever done so, and it is improbable that such should be the case. It is true that Earwigs are rather fond of dark secluded corners; but there is nothing in a person's ear which they would wish to eat. The Earwig feeds on larvæ and on tiny snails; also to some extent on fruit and flowers. Most gardeners fancy that it does more harm than is the case; and they are always busy trapping it, putting inverted flower-pots upon the sticks by which their handsome autumn dahlias are supported, for these flowers are among the insect's favourite haunts.

The character of Earwigs suffers for two reasons: first its name; and second, the formidable appearance of the pair of pincers or "callipers" attached to the hinder end of the body. First let us speak a moment of its name.

Why it is called an Earwig it is difficult to say, but the name, or a similar one, is very general. The French call it *perce-oreille*, or "ear-piercer," the Germans *Ohrwurm*, meaning "ear-worm"; while other continental nations give it similar names.

It is quite true that if we could unfold its large and delicate hind-wings we should find them shaped a little like the human ear. This fact is sometimes given as a reason for the name.

Then as to the pair of hard and horny callipers. They certainly have a rather alarming appearance, yet they are practically harmless. The insect does not seem to use them for fighting, although it sometimes gives a nip with them that scarcely hurts.

Their purpose is still little known. In some species they are certainly used for folding up and packing into place the large hind-wings, for these are folded fan-like in a beautiful and most elaborate way. But many species of Earwigs—and there are probably two or three thousand—possess no wings at all; yet these have callipers. Our Common Earwig, though it has wings, rarely uses them.

There is something else of interest about these callipers. Both males and females have them, and those of the female are comparatively small. Those carried by the males are much larger, and they also vary very much in size and shape. In some cases they are almost as long as the whole body of the insect; in others not one-third that length. The space enclosed between the callipers is sometimes oval, sometimes almost round. Hardly two insects will be found which have them quite alike.

The female lays eggs—fifteen or twenty—and from these small Earwigs are produced. Young Earwigs differ from their parents only in their softer skins and in not having wings.

The female is a very careful mother. She pays great attention to her eggs; sometimes she moves them to another place if she is not quite satisfied with where she has laid them; she broods on them like a hen, and she is said by some to pay the same attention to the little Earwigs after they are hatched.

Earwigs are fond of sweets; the last one that I saw was on a piece of cheese-cake which I was about to put into my mouth.

I hope that readers will now have a better opinion of the Earwig than they had before. It does not sting or bite, or slyly make its way into our ears, but seems an estimable character in every way.



STORIES FOR SUNDAY

The Story of Saint Ursula

ONCE upon a time in the land of Brittany there lived a good king, whose name was Theonotus. He had married a princess who was as good as she was beautiful, and they had one little daughter, whom they called Ursula.

It was a very happy and prosperous country over which Theonotus ruled, for he was a Christian, and governed both wisely and well, and nowhere was happiness more certain to be found than in the royal palace where the king and queen and little Princess Ursula lived.

All went merrily until Ursula was fifteen years old, and then a great trouble came, for the queen, her mother, died. The poor king was heart-broken, and for a long time even Ursula could not comfort him. But with patient tenderness she tried to do for him all that her mother had done, and gradually he began to feel that he still had something to live for.

Her mother had taught Ursula with great care, and the little maid had loved her lessons, and so it came to pass that there was now no princess in all the world so learned as the Princess Ursula. It is said that she knew all that had happened since the beginning of the world, all about the stars and the winds, all the poetry that had ever been written, and every science that learned men had ever known.

But what was far better than all this learning was that the princess was humble and good. She never thought herself wiser than other people, and her chief pleasure was in doing kind things and helping others. Her father called her the light of his eyes, and his one fear was that she would some day marry and leave him alone.

And true it was that many princes wished to marry Ursula, for the fame of her beauty and of her learning had spread to far distant lands.

Now on the other side of the sea, not very far from Brittany, there was a great country called England. The people there were strong and powerful, but they had not yet learned to be Christians. The king of that land had an only son called Conon, who was as handsome as he was brave. And when his father heard of the fame of the Princess Ursula he made up his mind that she should be his son's wife. So he sent a great company of nobles and ambassadors

to the court of Brittany to ask King Theonotus for the hand of the Princess Ursula.

That king received the messengers most courteously, but he was very much troubled and perplexed at the request. He did not want to part with Ursula, and he knew she did not wish to marry and leave him. And yet he scarcely dared offend the powerful King of England, who might be such a dangerous enemy.

So to gain time he told the messengers he would give them their answer next day, and then he shut himself up in his room and sorrowfully leaned his head upon his hand as he tried to think what was best to be done. But as he sat there thinking the door opened and Ursula came in.

"Why art thou so sad, my father?" she asked, "and what is it that troubleth thee so greatly?"

"I have this day received an offer for thy hand," answered her father sadly, "and the messengers are even now here, and because they come from the King of England I dare not refuse their request, and yet I know not what answer to give them when they return in the morning."

"If that is all, do not trouble thyself, dear father," answered Ursula; "I myself will answer the messengers and all will be well."

Then the princess left her father and went to her own room that she might consider what answer might be wisest to send. But the more she thought the more troubled she became, until at last she grew so weary that she took off her crown and placed it as usual at the foot of her bed and prepared to go to rest. Her little dog lay guarding her, and she slept calmly and peacefully until she dreamed a dream which seemed almost like a vision. For she thought she saw a bright light shining through the door, and through the light an angel coming towards her, who spoke to her and said:—

"Trouble not thyself, Ursula, for to-morrow thou shalt know what answer thou shalt give. God has need of thee to save many souls, and though this prince doth offer thee an earthly crown, God has an unfading crown of heavenly beauty laid up for thee, which thou shalt win through much suffering."

So next morning when the messengers came into the great hall to receive their answer, they saw the Princess Ursula herself sitting on the throne next to her father. She was so beautiful, and greeted them so graciously, that they longed more than ever that their prince might win her for his bride.

And as they listened for the king to speak, it was Ursula's voice that fell on their ears. She began by sending her greeting to the King of England and to Prince Conon, his son, and bade the messengers say

that the honour offered her was more than she deserved, but since their choice had fallen upon her, she on her side was ready to accept the prince as her promised husband, if he would agree to three conditions. "And first," went on Ursula, leaning forward and speaking very clearly and slowly, so that the foreign ambassadors might understand every word, "I would have the prince, your master, send to me ten of the noblest ladies of your land to be my companions and friends, and for each of these ladies and for myself a thousand maidens to wait upon us. Secondly, he must give me three years before the date of my marriage so that I and these noble ladies may have time to serve God by visiting the shrines of the saints in distant lands. And thirdly, I ask that the prince and all his court shall accept the true faith and be baptized Christians. For I cannot wed even so great and perfect a prince, if he be not as perfect a Christian."

Then Ursula stopped speaking, and the ambassadors bowed low before her beauty and wisdom and went to take her answer to their king.

Now Ursula did not make these conditions without a purpose, for in her heart she thought that surely the prince would not agree to such demands, and she would still be free. But even if he did all that she had asked, it would surely fulfil the purpose of her dream, and she would save these eleven thousand maidens and teach them to serve and honour God.

Ere long the ambassadors arrived safely in England, and went to report their mission to the king. They could not say enough about the perfections of this wonderful princess of Brittany. She was as fair and straight as a lily, her rippling hair was golden as the sunshine, and her eyes like shining stars. The pearls that decked her bodice were not as fair as the whiteness of her throat, and her walk and every gesture was so full of grace that it clearly showed she was born to be a queen. And if the outside was so fair, words failed them when they would describe her wisdom and learning, her good deeds and kind actions.

The king, as he listened to his nobles, felt that no conditions could be too hard that would secure such a princess for his son; and as for the prince himself, his only desire was to have her wishes fulfilled as quickly as possible, so that he might set sail for Brittany and see with his own eyes this beautiful princess who had promised to be his bride.

So letters were sent north, south, east, and west, to France and Scotland and Cornwall, wherever there were vassals of England to be found, bidding all knights and nobles to send their daughters to court

with their attendant maidens, the fairest and noblest of the land. All were to be arrayed in the finest and costliest raiment and most precious jewels, so that they might be deemed fit companions for the Princess Ursula, who was to wed Prince Conon, their liege lord.

Then the knights and nobles sent all their fairest maidens, and so eager were they to do as the king desired, that very soon ten of the noblest maidens, each with a thousand attendants, and another thousand for the Princess Ursula, were ready to start for the court of Brittany.

Never before was seen such a fair sight as when all these maidens went out to meet the Princess Ursula. But fairest of all was the princess herself as she stood to receive her guests. For the light of love shone in her eyes, and to each she gave a welcome as tender as if they had all been her own sisters. It seemed a glorious thing to think they were all to serve God together, and no longer to live the life of mere pleasure and vanity.

As may well be believed, the fame of these fair maidens spread far and near, and all the nobles and barons crowded to the court to see the sight that all the world talked about. But Ursula and her maidens paid no heed to the gay courtiers, having other matters to think upon.

For when the soft spring weather was come, Ursula gathered all her companions together and led them to a green meadow outside the city, through which a clear stream flowed. The grass was starred with daisies and buttercups, and the sweet scent of the lime blossoms hung in the air, a fitting bower for those living flowers that gathered there that day.

In the midst of the meadow there was a throne, and there the princess sat, and with words of wonderful power she told her companions the story of God's love and of the coming of our Blessed Lord, and showed them what the beauty of a life lived for Him might be.

And the faces of the listening maidens shone with a glory that was more than earthly, as they with one accord promised to follow the Princess Ursula wherever she might lead, if only she would help them to live the blessed life so that they too might win the heavenly crown.

Then Ursula descended from her throne and talked with each of the maidens, and those who had not yet been baptized she led through the flowery meadow to the banks of the stream, and there a priest baptized them while the birds joined in the hymn of praise sung by the whole company.

But all this while the Prince Conon waited with no little impatience for news of Ursula. He had been baptized and joined the Christian faith, he had

sent the companions she desired, and now he waited for her to fulfil her promise.

And ere long a letter reached him, written round and fair in the princess's own handwriting, telling him that as he had so well fulfilled her conditions, and was now her own true knight, she gave him permission to come to her father's court, that they might meet and learn to know each other.

(To be continued.)



THINGS TO MAKE

Paper Gliders

AN efficient model aeroplane takes a good deal of making, and is beyond the capacity of the average child. But the little paper fliers to be described can be fashioned by anybody with little difficulty. The only materials required are some fairly stiff note-paper, and a little sealing wax or thin sheet metal for weighting.

Gliders are sensitive and moody things, so the first few experiments may not be conspicuously successful; but if the maker perseveres, he will soon be in possession of some good specimens, which will have considerable stability, and fly straight and far. If the gliding angle is such that the model advances ten feet while falling one foot, the performance will be very creditable, but the average angle will be nearer 1 in 7.

Three simple models will now be described.

Model "A."—Double a piece of paper 8 inches long and $2\frac{1}{2}$ inches wide, and cut out, through both folds,

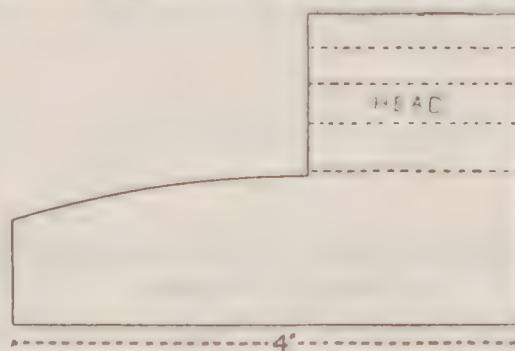
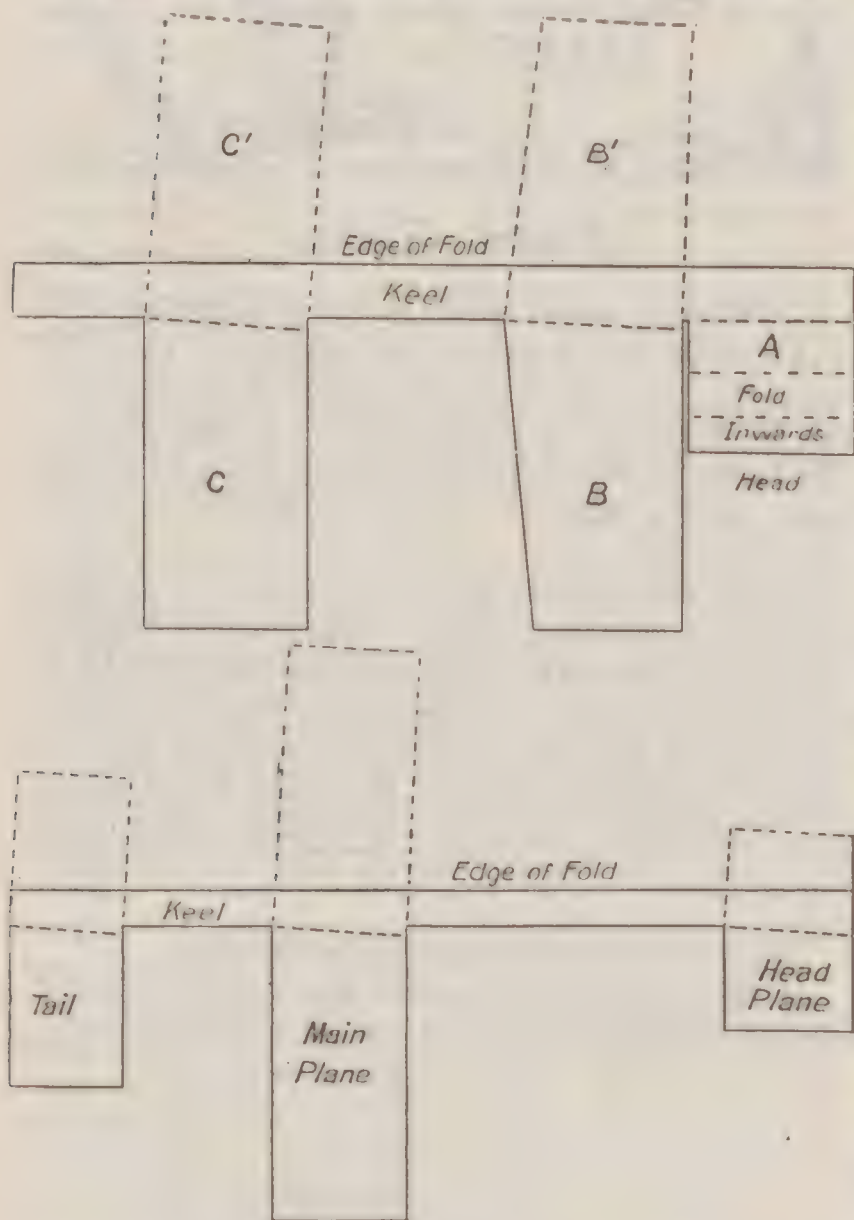


Fig. 1.—Paper Glider: Model "A."

the shape shown in Fig. 1. Flatten the piece, and fold the "head" inwards four times on the side away from the direction in which the paper was folded before being cut. Flatten the folds, and fix to the centre a little clip formed by doubling a piece of thin

metal $\frac{5}{16}$ by $\frac{1}{2}$ inch. Make certain that the wings are quite flat, and then, holding the glider between thumb and first finger, push it off gently. If the balance is right, it will fly quite a long way with a pretty, undulating motion. If too heavy in front, it will dive; if too light, it will rise suddenly and slip backwards to the ground. The clip or the amount of paper in the head must be modified accordingly. This type is extraordinarily efficient if the dimensions, weighting, and shape are correct, and one of the easiest possible to make.

Model "B."—The next model (Fig. 2, top) has two



slanting slightly upwards towards the front when expanded.

The model is now turned over, and the other wings are folded exactly on top of their respective fellows. Then the halves of the head are folded twice inwards, to bring the paper into as compact a form as possible. It remains to open out the wings at right angles to the keel, and then raise their tips slightly, so that two planes of a pair shall make what is called a "dihedral" angle with one another.

Before launching, look at your model endways, and make sure that the rear planes are exactly in line with those in front. It is essential that they should be so for straight flight. Then grip the keel at the centre between finger and thumb, and launch gently. Mark how your glider behaves. If it plunges persistently, trim off a very little of the head. If, on the contrary, it settles almost vertically, weight must be added in front. The position of the weight is soon found by sliding a metal clip along the keel until a good result is obtained.

Note that if the leading edges of the front wings are bent slightly downwards, the glider may fly much better than before.

A good specimen of this type is so stable that if launched upside down it will right itself immediately, and make a normal flight.

Model "C."—This is cut out of doubled paper, according to the solid lines of Fig. 2 (bottom). The three sets of planes are bent back in the manner already described, but the front planes are given a somewhat steeper angle than the others. This type is very stable, and fairly efficient.

General Remarks.—Always pick up a glider by the keel or middle, not by one of the wings, as a very little distortion will cause trouble.

The merits of a glider depend on length and on straightness of flight; so in competition the launching height should be limited by a string stretched across the room—say, six feet above the floor. If the room be too short for a glider to finish its flight, the elevation at which it strikes the wall is the measure of its efficiency.

Out-of-doors flights are impracticable with these very frail models when there is the slightest breeze blowing. On a perfectly calm day, however, much better fun can be got out of doors than in, owing to the greater space available. A good glider launched from a second-floor window facing a large lawn should travel many yards before coming to grass.

Large gliders of the types detailed above can be made of very stout paper, stiffened with slips of cane or bamboo; but the time they demand in construction might perhaps be more profitably spent on a power-driven model aeroplane.

sets of wings "tandem." Double a piece of paper, and cut out of both folds simultaneously a figure of the shape indicated by the solid lines in the diagram. The portion A is square, and forms the head weight; B indicates the front planes, C the rear planes. Bend the upper fold of each pair into the positions B', C', marked by dotted lines. Their front edges make less than a right angle with the keel, to ensure the wings

Our Competitions

Rules for Competitors

COMPETITORS *must* attend to the following rules:—

1. Subject to the age limits, you may enter for any or all of the competitions, but you must attach to your answers one Competition Form cut from the back page of the cover of the current number of the paper. It must be filled up as directed.
 2. A Competition Form *must be attached to one of the papers sent in by each competitor.* Other competitions entered must have the name, address, and age of the sender written distinctly upon them.
 3. Care should be taken with *writing and neatness*, as these will be taken into consideration in judging all competitions.
 4. Address your answers to "Editress," *Children's Paper*, c/o Thomas Nelson and Sons, Ltd., Parkside Works, Edinburgh.
 5. No answers received later than February 15 will be considered.
- [We rely upon you to send in your own unaided work.]

Competitions for February

For all Ages up to Fifteen

ESSAY COMPETITION

Write an original story illustrating the proverb, "Don't count your chickens before they are hatched."

ARITHMETICAL PUZZLE

Here is a long division sum in which the digits have been replaced by the letters of a certain word. The consecutive letters of the word represent the digits in their natural sequence from 0 to 9. By examining the problem carefully you will be enabled to find out what digit each letter represents and so discover the key word.

IPC) LCMGIP (EAM
LGLT

MLTI
GIMG

GLGP
GPGM

HCM

DRAWING AND COLOURING COMPETITION (A)

Make an original drawing to advertise any article you like, and colour it with water-colours or chalks.

For Children under Twelve only

COMPOSITION COMPETITION

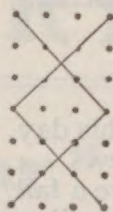
Write a short essay about the picture on this page, mentioning the effect of the music on the following people:—

1. The blind fiddler's wife, who has heard the tune so often before.
2. The old grandfather.
3. The father, mother, and baby.
4. The two little children.
5. The two boys to the right of the picture.
6. The dog near the mother's seat.

DRAWING AND COLOURING COMPETITION (B).

Make a drawing of a basket of oranges, and colour it with water-colours or chalks.

ZIGZAG PUZZLE



If the following definitions are correctly guessed and the words then placed below one another, the two zigzags will spell two words of much the same meaning. A kind of tree, an air, dimension, a town in Austria, two thousand and fifty-one, a place to sit, large bodies of water.

For Children under Ten only

LETTER COMPETITION

Write a letter to the Editress describing how you liked school when first you went there, and how you like it now.

DRAWING AND COLOURING COMPETITION (C)

Make a drawing of a pot of hyacinths, and colour it with water-colours or chalks.



THE BLIND FIDDLER. (By Sir David Wilkie, R.S.A.)

Motto Competition

All readers may enter this competition. A book prize will be given for the motto which is published in the paper. Each motto should have the name of the author from whom the quotation is taken.

A "Smiles" Competition

A Book Prize will be given for the brightest "Smile" sent in this month.

Prize List for December

ESSAY COMPETITION

Prize-Winners.—John G. Hill, Hillmount, Balfour Avenue, Whitehead, Co. Antrim. Annie Manning, Harthill C.E. School, near Chester. Jack Douthwaite, Worsthorne Council School, near Burnley, Lancs.

Honourable Mention.—Arthur Holden and Eliza Valentine, St. Paul's C.E. School, Adlington; Basil Hoskins, Southfield School, S.W.; Jeannette Craig, Pollokshields, Glasgow; Nancy Harris, Dargle Bay; Alice Coates, Worsthorne Council School, near Burnley; Doreen Buss,

Midhurst; Nellie Loudwell, Gillingham; Florence Cook, Fulham, S.W.; Dorothy Darrant, Stoneybridge School, Belbroughton; May C. Millican, Aghadowey.

JUMBLED PROVERBS

The hidden proverbs were:—1. Every dog has his day. 2. Delays are dangerous. 3. No news is good news. 4. Faint heart never won fair lady. 5. Pride will have a fall.

As no competitor sent in correct answers for all of these proverbs, no awards are being made in this section.

DRAWING AND COLOURING COMPETITION (A)

(There were so many beautiful Christmas cards sent in that, if it had been possible, the Editress would have liked to have awarded at least a dozen prizes.)

Prize-Winners.—Fred J. Chapple, The Southfield School, Wandsworth, London, S.W.18. Nicholas Whiteside, Br Mary Lane, Hesketh Bank, near Preston. W. Hewson, The Southfield School, Wandsworth, S.W.18. James Dornan, Carricknacesna, Saintfield, Co. Down. Alistair Thomson, 2 Bellfield Terrace, Inverness.

Honourable Mention.—C. H. Brown, The Southfield School, Wandsworth, S.W.18; Florence Cook, Fulham, S.W.6; Adelaide Macfarlane, Bearsden, by Glasgow; Morton Reyburn, Bridge of Weir; Jane Haydock and John Thornley, St. Paul's C.E. School, Adlington, Lancs; Douglas Bywater, St. George's Boys' School, Wallasey; Audrey Simpson, Blackburn; Robert Hazell, Redhill, Surrey; Grace Edna Bowen, Gillingham; John Brennan, Larne.

COMPOSITION COMPETITION

Prize-Winners.—Jim Millen, 14 Manse Road, Bangor, Co. Down. Dorothy Hardy, 684 Fulham Road, London, S.W.6. Phyllis Churchill, Barnsole Road Girls' School, Gillingham, Kent. Robert Irving, St. Paul's C.E. School, Adlington, near Burnley, Lancs.

Honourable Mention.—Winifred Alcock, Leeds; Decima Rawlinson, St. Dominic's School, Harpenden; Dulcie Rofe and Dorothy Ellis, Southfield School, S.W.18; Lilian Ormerod, Worsthorne Council School, near Burnley; Doris Lacy and Phyllis Davies, Stoneybridge School, Belbroughton; William Varty, St. George's Boys' School, Wallasey; Lily Semple, Newtown Stewart, Co. Tyrone; Kathleen Brazier, Milton Church Hall School.

DRAWING AND COLOURING COMPETITION (B).

Prize-Winners.—Ralph Williams, St. George's Boys' School, Wallasey. Marjorie Moore, Stoneybridge School, Belbroughton, near Stourbridge.

Honourable Mention.—Edith Dale, Adlington, near Macclesfield; William D. Caig, St. George's Boys' School, Wallasey; Annie Metcalf, Boaler Street Council School, Liverpool; James Dornan, Saintfield, Co. Down.

HISTORICAL PUZZLE

The hidden names of persons well known in British history were: (1) Nelson; (2) Pitt; (3) James; (4) Wallace; (5) Alfred; (6) Mary; (7) Gordon; (8) Arthur; (9) Henry; (10) Pym.

Prize-Winners.—Winnie Calder, 11 Darnell Road, Trinity, Edinburgh. Kenneth Le Gras, 77 Hazeldene Road, Goodmayes, Essex. Dorothy Moses, "Glen Head," Bracken Road, Darlington.

Honourable Mention.—Constance Hutton, Aberdeen; Nora Hillis, Belfast; D. Rawlinson, St. Dominic's School, Harpenden; Phyllis Winifred Godfrey, Valley Girls' School, Bromley; Norah Mahood, Putney, S.W.15; Bertie Rayner, Maldon, Essex; Lily Beveridge, Cle-

thorpes; Alison Pagan, Gateshead-on-Tyne; Sybil Randall, Portsmouth; Iain Campbell, Fearn; Eileen Colbourne, Southfields, S.W.18; Samuel Coulter, Limavady; Mary Saywell, Barnsole Road School, Gillingham; Harold Lord, St. George's Boys' School, Wallasey; Phyllis Tiffin, Bradford; Henry S. McCall, Cambuslang.

LETTER COMPETITION

Prize-Winners.—John Bridge, Worsthorne Council School, near Burnley, Lancs. Maurice Burke, The Southfield School, Wandsworth, S.W.18. Gwen Hughes, Henbury School, Henbury, Bristol.

Honourable Mention.—Frederick Webster and Margaret Skinner, Stoneybridge School, Belbroughton; Phyllis Ogbourne, Henbury School, Bristol; Florence Logue, Armagh; Isabel Shand, Worsthorne Council School, near Burnley; Sheila M. Burrough, Putney, S.W.15; Frances Long, Lydiate Ash, near Bromsgrove; Jim Millen, Bangor, Co. Down; Victor J. Field, Southfields, S.W.18; Vincent Walkerley, St. Dominic's School, Harpenden.

DRAWING AND COLOURING COMPETITION (C)

Prize-Winners.—Frederick Seabourne, Stoneybridge School, Belbroughton, near Stourbridge. Jean Summers, The Colmers Farm, Rubery, Birmingham.

Honourable Mention.—David John French, Barrhead; John Bridge, Worsthorne Council School, near Burnley, Lancs; Margaret MacLachlan and Edgar Lockley, Stoneybridge School, Belbroughton.

POSTMARK COMPETITION

The postmarks were as follows: Bradford, Leeds, Whitby, Sheffield, Harrogate, Scarborough. One competitor sent the following letter:—

DEAR EDITRESS,—Did the postmen go on strike? There must have been some delay, or the little girl would have received the parcels long before Christmas morning!—Yours, MILDRED KNOWLES.

I am afraid, however, that the artist who drew the postmarks had more to do with the parcels not arriving than the postman!

It is impossible to print the names of all those who sent in correct answers, but the following were the neatest:—

Prize-Winners.—Eleanor Shaw, Grey Lees Farm, Dunnington, York. Charles Pemberton, 22 Wellfield Road, Blackburn. Mildred Knowles, 52 Tidings Hill, Halstead, Essex. Bertha W. Smith, 60 Gloucester Road, Bootle. Doris Francis, 21½ William Street, Newtownards, Co. Down.

Honourable Mention.—Alexander M'Intosh, Inverness; Marion Corwell, Warrington Road School, Widnes; John Baird, George Craig, and Bob Calderwood, Edinburgh; James Findlay and Eva Gray, Yoker; John Thomson, Helen Scott, and Elsie B. Dawson, Glasgow; Maurice Haskell and Phyllis Randall, Portsmouth; Wilbur Cockroft and Alexander M'Neilly, Belfast; Noel Thomas, Stoneybridge School, Belbroughton; William Varty, St. George's School, Wallasey; Ivy Hall, Barnsole Road School, Gillingham; Fred Hutchinson, Fulham, S.W.6; Walter Matholie, Bromley; James S. Gibson, Inner Lodge, Ellon Castle, Aberdeenshire; J. Balchin and Charles Lovegrove, Southfield School, S.W.18; Joan Hewitt, Harpenden; Willie Hoey, Greenock; Rosie Wright, Kingston; Eugenie Duvoisin, Putney; Olga Jones, Wrexham; Maggie Todd, Larne; Bobbie Lusk, Ballyclare; Vera Pryce, Merthyr Tydfil; William Fingland, Lenzie; Peter Campbell, Saltcoats; Bessie Williamson, Paisley; Doris Leadbetter, Warrington Road School, Widnes; Willie Cross, Banbridge.



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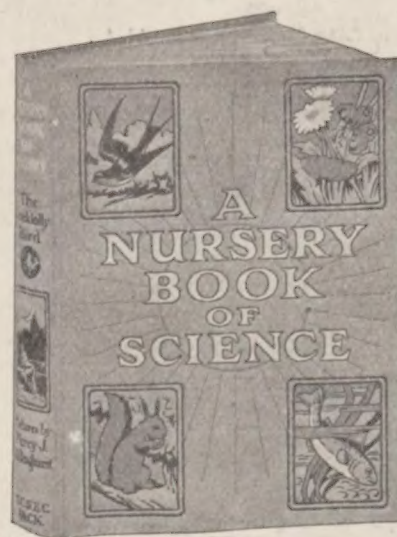
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CHILDREN'S PAPER
COMPETITION FORM. [Feb.

Cut this out and attach it to any papers you may send in for Competition.

Name.....

Address.....

Age last Birthday.....